METHODS, CIRCUITS, AND SYSTEMS FOR UTILIZING IDLE TIME IN DYNAMIC FREQUENCY SCALING CACHE MEMORIES

ABSTRACT

Dynamic Frequency Scaling (DFS) cache memories that can be accessed during an idle time in a single low frequency DFS clock cycle are disclosed. The access can begin during the idle time in the single low frequency DFS clock cycle and may continue during a subsequent low frequency DFS clock cycle. The idle time can be a time interval in the single low frequency DFS clock cycle between completion of a single high frequency DFS clock cycle and completion of the single low frequency DFS clock cycle. Related circuits and systems are also disclosed.